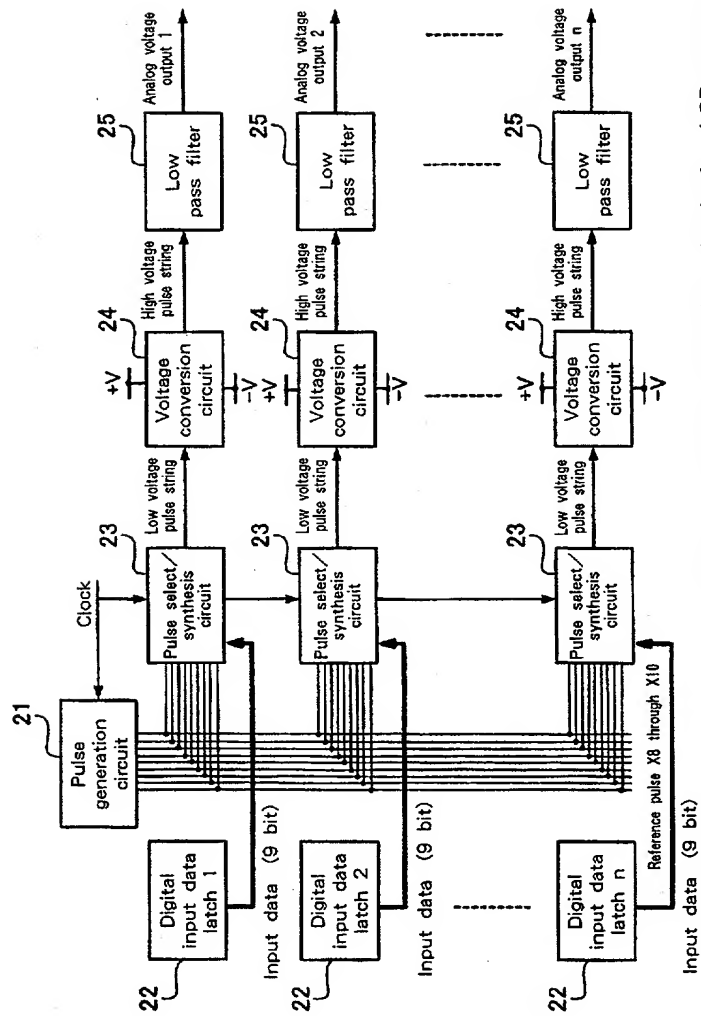
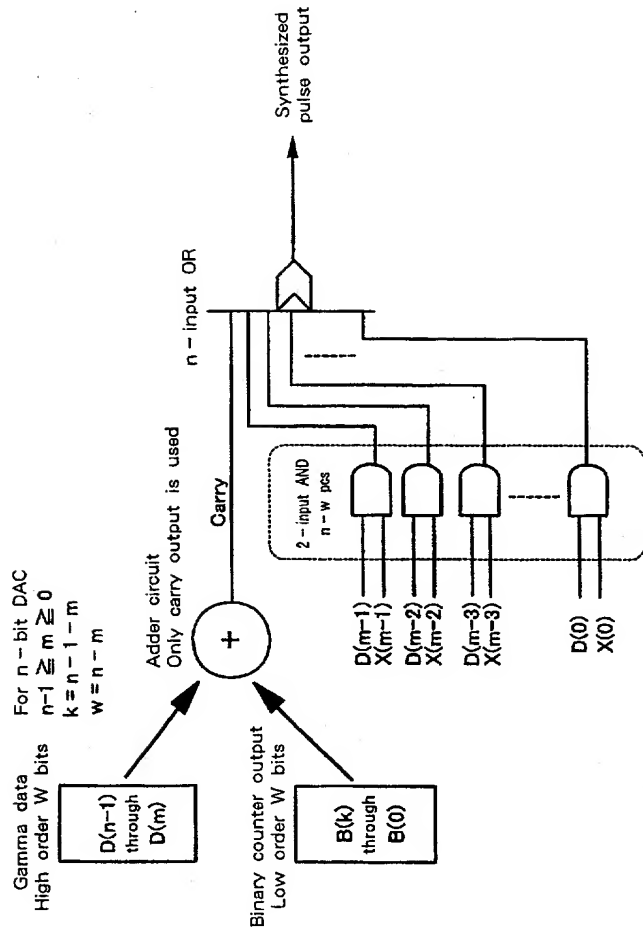


Fig. 1



Configuration for gamma reference voltage generation circuit for LCD source driver

Fig. 2



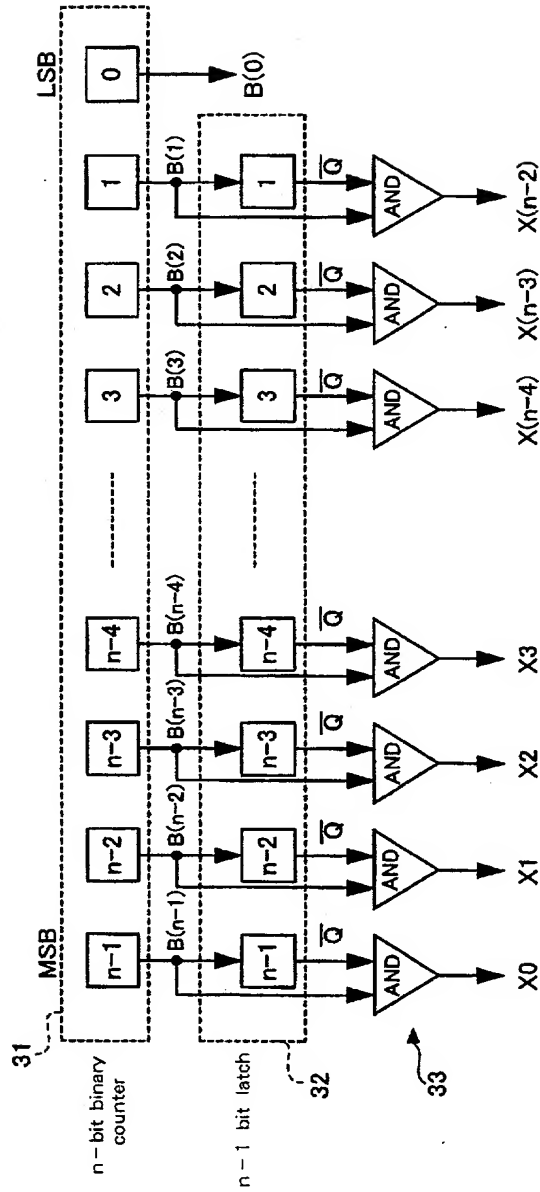
Details of pulse generation circuit and synthesis circuit for  $n$ -bit DAC

Fig. 3

Page 28 of 40

**\*Note : Assuming digital input data is n bit**

**Fig. 4**



Typical configuration of pulse generation circuit for PDM type DAC

Fig. 5

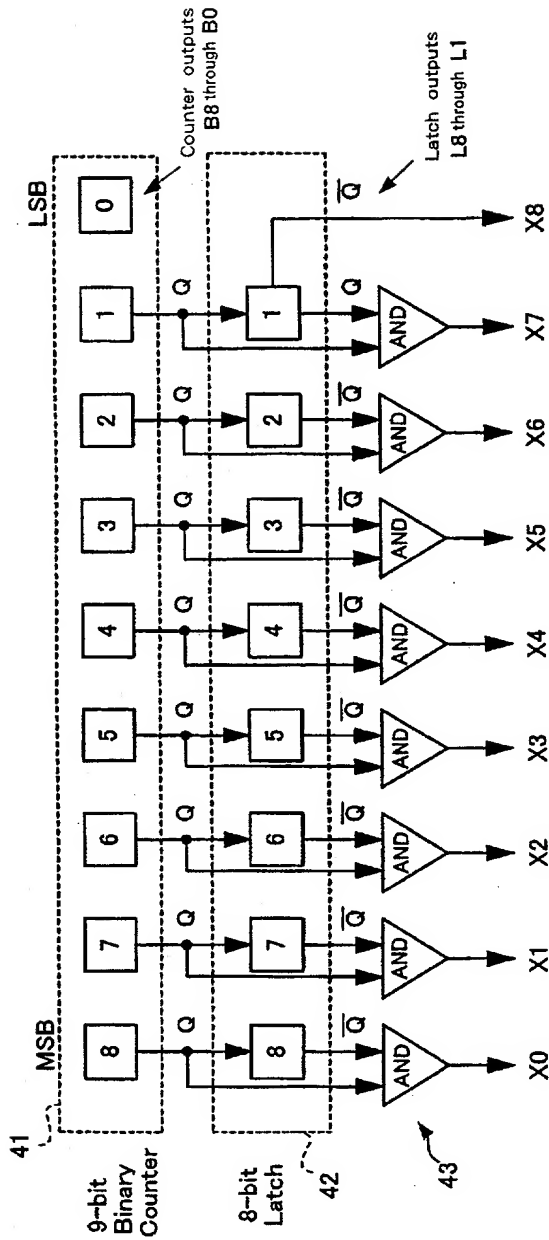
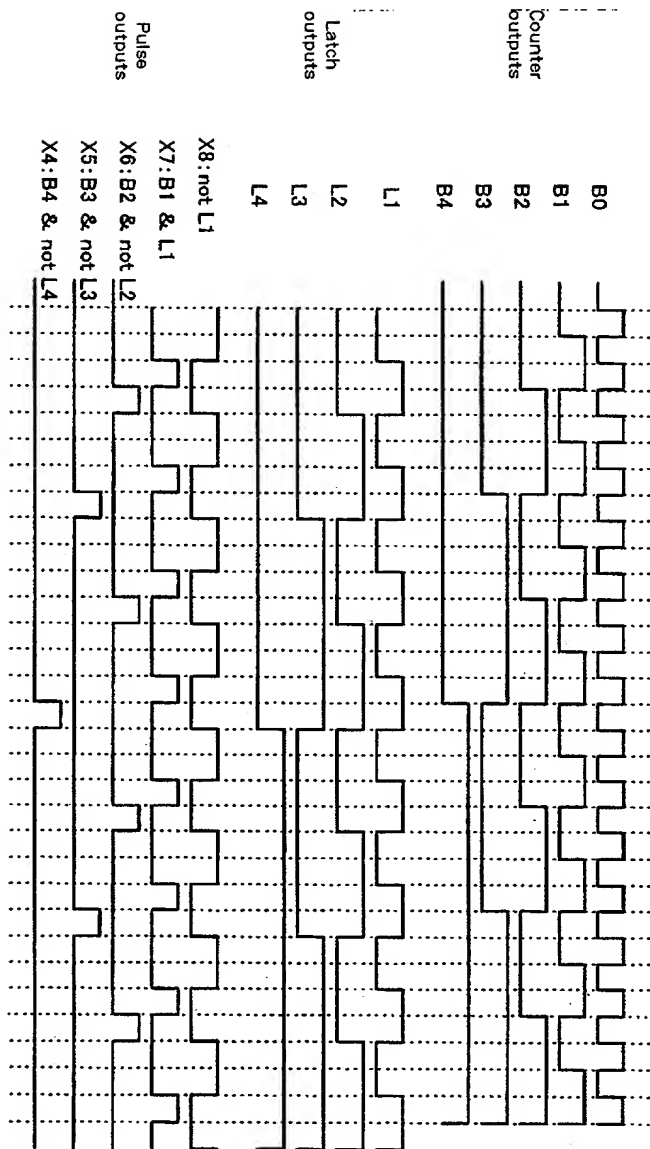


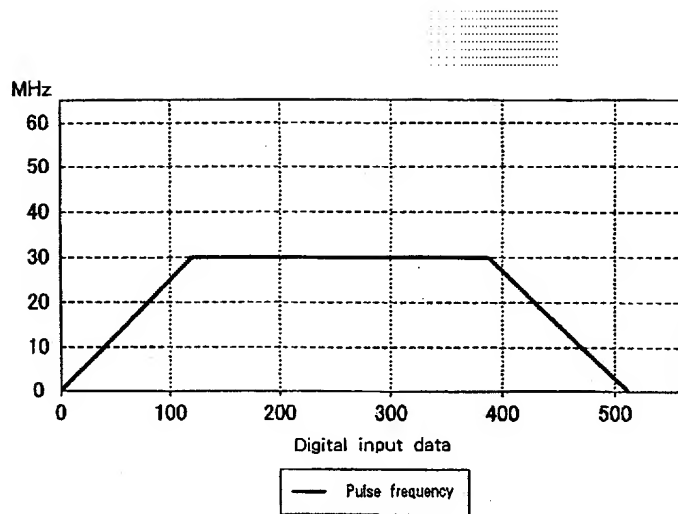
Fig. 6



Example pulse for PDM type DAC

Fig. 7

10063788 - 051302



Relationship between digital input data  
and pulse string frequency for pulse generation circuit

Fig. 8



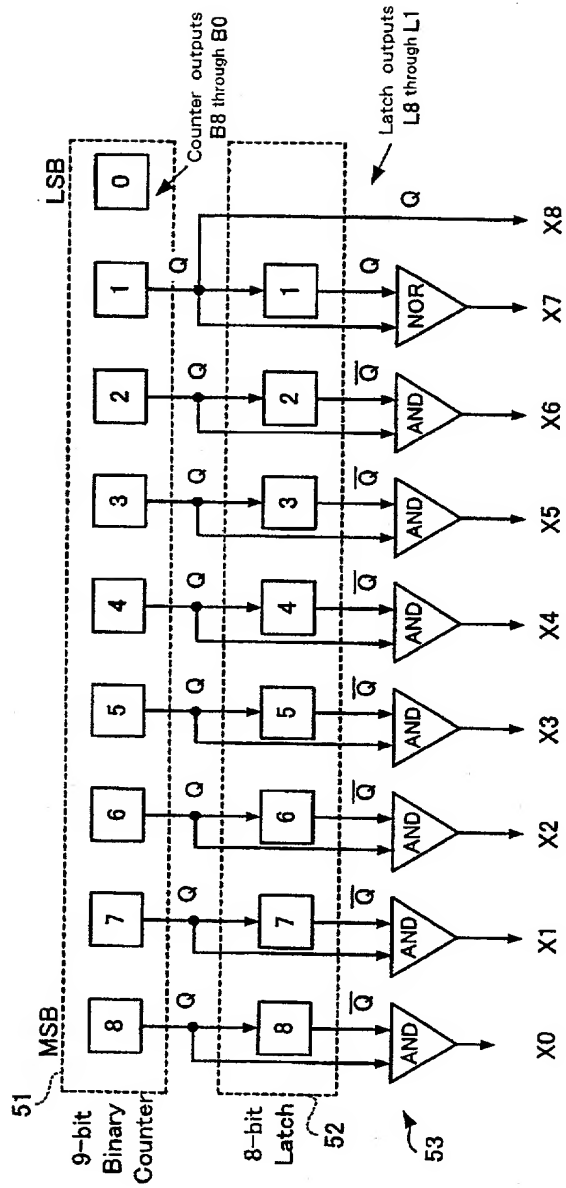
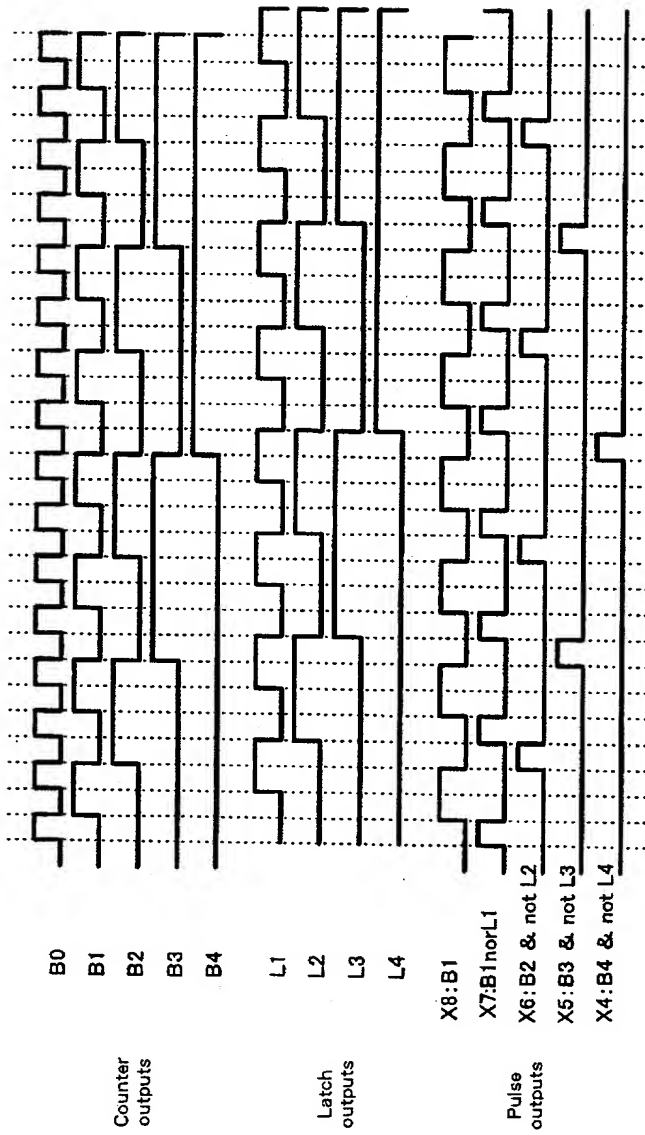


Fig. 9



Example pulse for PDM type DAC of the invention

Fig. 10

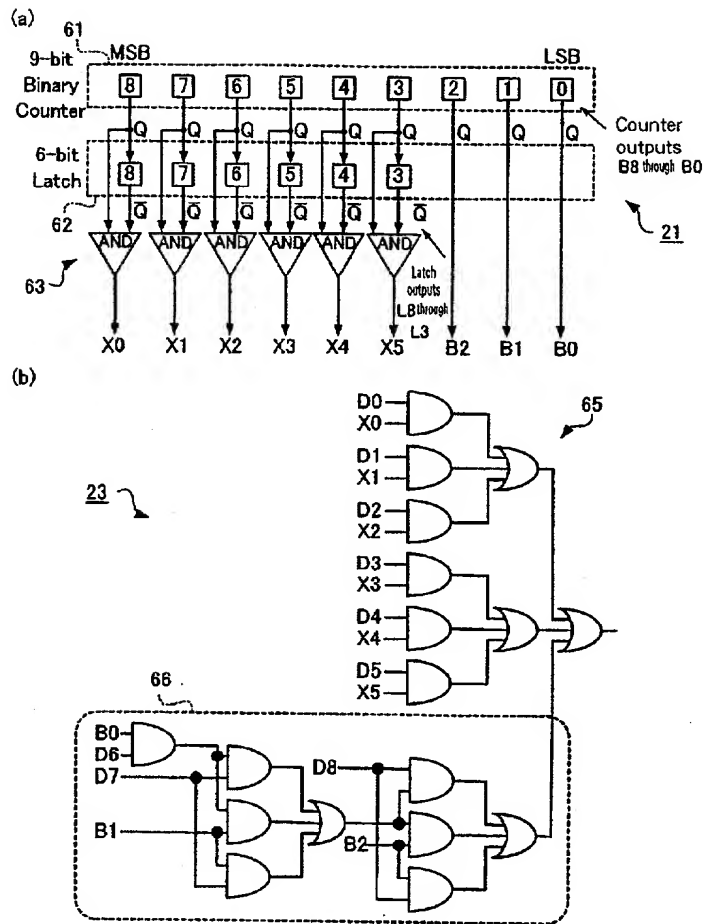
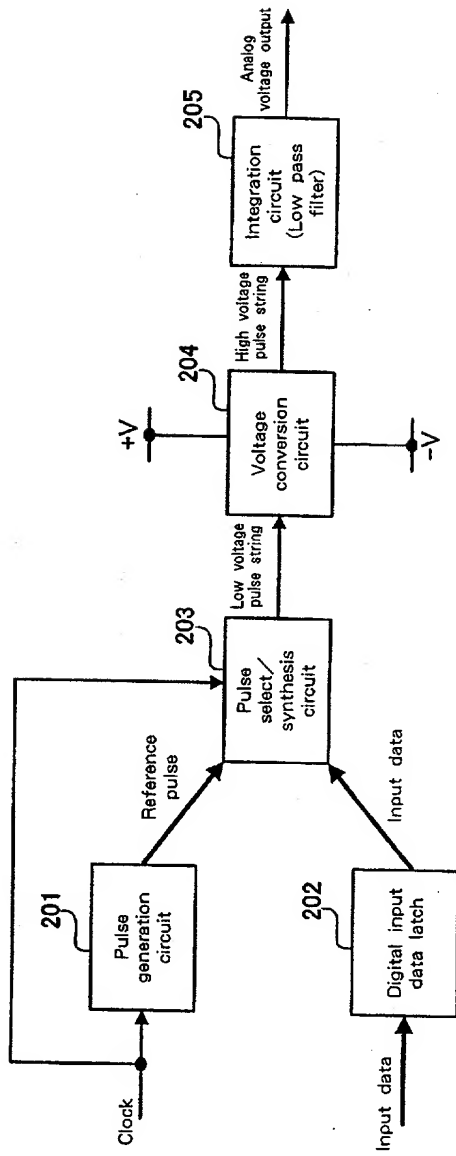


Fig. 11

Comparison of number of  
gates between 4 clock unit and 8 clock unit

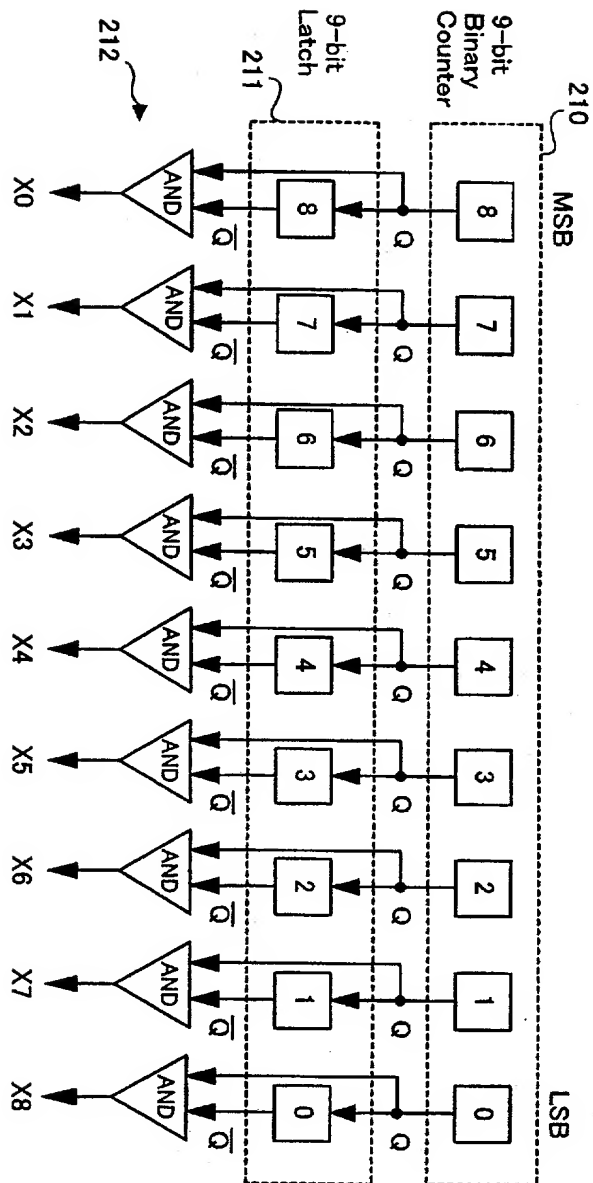
	4Clock	8Clock
Counter section		
Latch	17	15
2 - input AND	8	6
Pulse synthesis section (1 Set)		
2 - input AND	9	13
3 - input OR	4	5
Pulse synthesis section (10 Sets)		
2 - input AND	90	130
3 - input OR	40	50

Fig. 12



Configuration of PDM type DAC

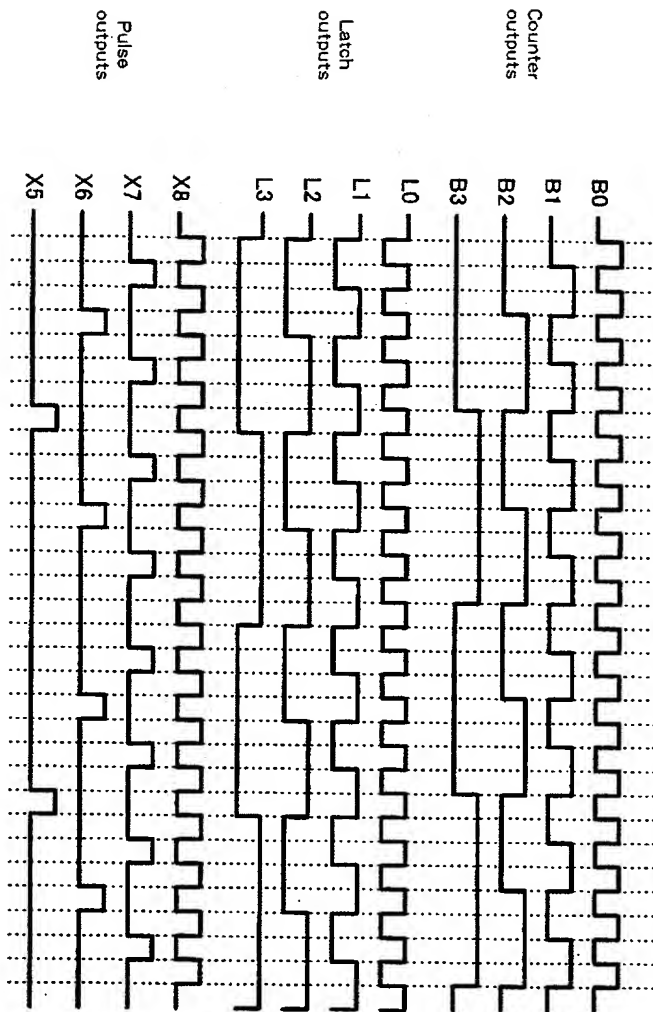
Fig. 13



Configuration of pulse generation circuit for PDM type DAC

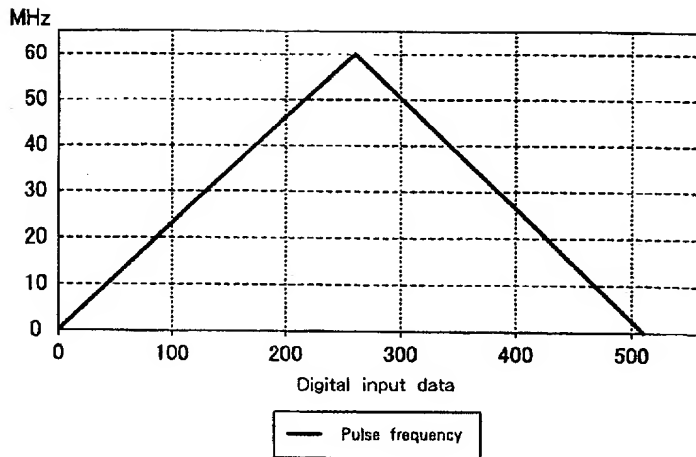
Fig. 14

10063788\_051302



Example pulse for PDM type DAC

Fig. 15



Pulse string frequency corresponding to each data

Fig. 16